

2015 ASCOBANS Annual National Reports

This questionnaire has been pre-filled with answers given in 2014 National Report - **please update!**

This format for the ASCOBANS Annual National Reports was endorsed by the 6th Meeting of the Parties in 2009. Reports are due to be submitted to the Secretariat by 31 March of each year.

Parties are requested to use this report to provide **new** information on measures taken or actions towards meeting the objectives of the Conservation and Management Plan and the Resolutions of the Meeting of the Parties.

General Information

Name of Party

> France

Report prepared by

This should indicate the name and affiliation of the lead person for filling in the report.

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Function	National Focal Point
Organization	Ministry of Environment, Energy and Sea
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Coordinating Authority and National Coordinator

Please confirm the Coordinating Authority responsible for the national implementation of the Agreement, and give the name and contact details of the officially appointed National Coordinator (Focal Point).

> None

List of National Institutions

List of national authorities, organizations, research centres and rescue centres active in the field of study and conservation of cetaceans, including contact details

> Laboratoire d'Etude des Mammifères Marins, Océanopolis, LEMM sami.hassani@oceanopolis.com

> Centre d'Etudes Biologique de Chizé et La Rochelle, UMR 7372, CNRS et Université de La CNRS, CEBC, vincent.ridoux@univ-lr.fr

> Observatoire PELAGIS, UMS 3462, Université de La Rochelle et CNRS, olivier.van-canneyt@univ-lr.fr / pelagis@univ-lr.fr

> Parc naturel marin d'Iroise, Agence des Aires Marines Protégées, PNMI, philippe.le-niliot@aires-marines.fr

> Groupe d'Etude des Cétacés du Cotentin, GECC, gecc@hotmail.fr

Habitat Conservation and Management

Fisheries Interactions

Direct Interaction with Fisheries

1.1 Investigations of methods to reduce bycatch

> 1- Dedicated programme (OBSMER) : the national dedicated programme to all the observations on board includes the English Channel set net fisheries which is not asked by the European regulation. This program is implemented by the Ministère de l'Environnement et de la Mer (Direction des Pêches Maritimes et de l'Aquaculture) and IFREMER. All the results are now included in the national report for regulation 812/2004. For set net and pelagic trawl fisheries, observers for the EC regulation (n° 812/2004) are deployed for vessels greater than 15 meters and through pilot studies for vessels less than 15 m. However it was not always possible to put observers on boats less than 8m for safety reasons.

The last national report is available for 2013. From the database, observations done in year 2015 have recorded 4 common dolphins (areas VII and VIII) and 3 harbor porpoises (area VIII), all are bycaught in set net.

> 2- In 2014, a synthesis on interactions between cetaceans and set nets in France will be achieved in order to provide some information to stakeholders in preparing the new European regulation. This synthesis uses all the observation data available since 2008 : Analysis of the bycatch of marine mammals in set net fisheries of France (Morizur et al. 2014 - Ifremer report - <http://archimer.ifremer.fr/doc/00209/32016/>).

Abstract : During the years 2008 to 2013 several observations of catches were planned on board of set netters fishing in the bay of Biscay, in the English Channel and in the North sea. All the observations were done on nets without pingers and they were pooled to provide an average bycatch rate of marine mammals by fleet. Estimates of annual bycatch by using the fishing efforts of the year 2012 were provided by fleet. Harbour porpoise *Phocoena phocoena* was the most common bycatch in set nets. An average annual estimate of 600 harbour porpoises was obtained for the French fleet; other species recorded in set nets were mainly common dolphin *Delphinus delphis*, striped dolphin *Stenella coeruleoalba* and the two species of seals (*Phoca vitulina*, *Halichoerus grypus*); 80 % of the porpoise bycatch occurred in the trammel net fisheries for monkfish and for sole. Gill nets in area VIII were also responsible of 20 % of the bycatch. . Most of the porpoise bycatch occurred in the range of 80-110 meters depth. Some fishing métiers in the area concerned with the regulation on pingers as gill nets for spider crab were found with no bycatch of porpoises. Bycatch occurred on the eastern and western ends of the English Channel but did not occur in the middle of the Channel. Bycatch rates were calculated by fishing operation and the study describes their variability. Incidental porpoise bycatch seems seasonal and the seasons for bycatch are not the same in all the areas. The results are discussed in relation with the existing European regulation 812/2004 in which trammel nets are not mentioned.

> (Need to update with PNMI)

A programme named INPECMAM has been funded and agreed between the fishermen, the Iroise sea MPA, University of Brest, the National Natural History Museum and Oceanopolis to work on the by-catch of marine mammals (cetaceans and seals) and the depredation in set net fishery in the Iroise sea with also a social approach on these issues. The low result in observed by-catch don't allow, statistically, an extrapolation to estimate the by-catch of the set net fisheries in Iroise Sea .The final report has been published and is available through this link : <http://www.parc-marin-iroise.fr/Actualites/Interaction-peche-et-mammiferes-marins-le-rapport-final-INPECMAM-en-ligne>

The perspective is to continue such research on this topic focusing on areas and period of risk.

1.3 Other relevant information

Other relevant information, including bycatch information from opportunistic sources

> Since 2012 January 1st, a French ministerial regulation requires fishermen to report marine mammals bycatch and contributing to scientific knowledge. The initial aims of this regulation don't produce bycatch estimates but should involve fishermen through scientific program on knowledge of the species (composition of bycatches, spatial and temporal distribution,...)

Currently no bycatch was directly reported by fishermen in this framework.

1.4 Report under EC Regulation 812/2004

Please provide the link to your country's report under EC Regulation 812/2004.

> The last national available report is given for 2013 (with limited access on the Ifremer web site)

Reduction of Disturbance

2.1 Anthropogenic Noise

Please reference and briefly summarise any studies undertaken

> IFREMER continues to apply mitigation measures on his seismic surveys, based on the classical international recommendations. The use of a PAM system is now being considered when high-power seismic sources are to be deployed. The order of a complete passive monitoring system is planned for early 2013.

Study projects are being launched in France (about the monitoring and control of the anthropogenic noise in the sea) in the framework of the MSFD (Marine Strategy Framework Directive). Most noticeably, a synthesis report (Bilan des activités anthropiques génératrices de bruit sous-marin et de leur récente évolution en France Métropolitaine) has been produced by SHOM (the French Hydrography Service). However at this stage these works do not address directly the impact on the cetacean populations

2.3 Major Incidents

Major Incidents Affecting Significant Numbers of Cetaceans (two or more animals)

	Date	Location	Type of Incident	Further Information
Incident				
Incident				
Incident				
Incident	march and april 2014	English Channel Coast	Unusual Mortality Events period	75 harbor porpoises recorded in 2 months
Incident	january to march 2014	Atlantic Coast	Unusual Mortality Events period	280 common dolphins recorded in 3 months

2.4 Pollution and Hazardous Substances

Please report on main types of pollution and hazardous substances (including source, location and observed effects on cetaceans). Please provide information on any new measures taken to reduce pollution likely to have an impact.

> > Chemical pollution was evaluated in five species of small cetaceans that frequent the NW Iberian Peninsula waters: the common dolphin, the harbour porpoise, the bottlenose dolphin, the striped dolphins and the longfinned pilot whale. To this aim, 14 trace elements (Ag, As, Cd, Co, Cu, Cr, Fe, Hg, Mn, Ni, Pb, Se, V, Zn), 32 congeners of polychlorinated biphenyl ethers (PCBs) and 9 congeners of polybrominated diphenyl ethers (PBDEs) were analysed in samples of the main storage tissues for these pollutants (i.e. liver, kidney and blubber) collected from stranded and/or by-caught animals along the NW Iberian Peninsula coast between 2004 and 2008. Fieldwork was conducted by members of the Spanish (Coordinadora para o estudo dos mamíferos marinhos, CEMMA) and Portuguese (Sociedade Portuguesa de Vida Salvagem, SPVS) stranding networks and was part of the PhD project of P. Mendez Fernandez. This project was a collaboration between the university of La Rochelle, the University of Minho, in Braga Portugal, the marine laboratory of Scotland and the Spanish Oceanographic Institute (IEO) from Vigo, Spain. Differences related to biological factors such as age and sex and /or to ecological factors such as feeding habits or bioavailability of the various elements were observed in the bioaccumulation of the trace elements between the five species. Pilot whale and striped dolphin showed the highest concentrations of renal Cd (30 ± 26.9 and $10.3 \pm 11.0 \mu\text{g.g}^{-1}$ wet weight respectively) and the highest concentrations of hepatic Hg (31.0 ± 59.5 and $22.9 \pm 39.1 \mu\text{g.g}^{-1}$ wet weight respectively) and Se (16.9 ± 30.1 and $12.3 \pm 17.2 \mu\text{g.g}^{-1}$ wet weight respectively). Comparing with other studies world-wide, the element concentrations (mercury and cadmium) found in Iberian toothed whales indicate that these populations are not specially threatened by Hg and Cd exposure in the area Méndez-Fernandez et al, 2014a).

Concerning organic pollutants, of the five species studied, bottlenose dolphin and harbor porpoise showed the greatest concentrations of PCBs. Both species exceed the toxic threshold of $17 \mu\text{g.g}^{-1}$ lipid weight (PCB Aroclor equivalent) for health effects on marine mammals, for 100% and 75% of the individuals analysed, respectively. Overall, the PCB and PBDE levels observed in the North West Iberian Peninsula toothed whales were of the same order of magnitude or lower than those reported by previous studies in the NE Atlantic but higher than studies carried out in the southern Atlantic and Pacific Ocean (Méndez-Fernandez et al, 2014b).

2.5 Other Forms of Disturbance

Please provide any other relevant information, e.g. relating to recreational activities affecting cetaceans.

> None

Marine Protected Areas

Marine Protected Areas for Small Cetaceans

3.1 Relevant Information

Please provide any relevant information on measures taken to identify, implement and manage protected areas for cetaceans, including MPAs designated under the Habitats Directive and MPAs planned or established within the framework of OSPAR or HELCOM.

> > (Observatoire PELAGIS - 2015) According to the European Union Habitats and Birds Directives, EU Member States must extend the Natura 2000 network to marine ecosystems, through the evaluation of existing marine protected areas (MPAs) and eventually the designation of new offshore one. However, the initial status of cetacean and seabird communities across European waters is often poorly understood. It is assumed that an MPA is justified where at least 1% of the "national population" of a species is present during at least part of its biological cycle. Habitat-based models of cetacean and seabird distribution were used to assess the networks of existing Natura 2000 sites and offshore proposed areas of biological interest. The habitat models used here were Generalised Additive Models computed from SAMM aerial surveys observational data collected during the winter 2011-2012 and the summer 2012 across the English Channel, Bay of Biscay and north-western Mediterranean Sea. Based on these models, a ratio between species relative abundance predicted within each MPA and the total relative abundance predicted over the French Atlantic or Mediterranean marine regions was computed and compared to the 1% threshold. This assessment was conducted for winter and summer independently, providing information to assess the relevance of individual MPAs and MPA networks at a seasonal scale. Our results showed that the existing network designed for coastal seabird species was relevant in both marine regions. In contrast, a clear shortfall was identified for offshore seabird species in the Atlantic region and for cetaceans in both regions. Moreover, the size of MPA appeared to be a crucial feature, with larger MPAs being relevant for more species. Finally, we showed that the proposed large offshore areas of interest would constitute a highly relevant network for all pelagic species, with e.g. up to 61% of the Globicephalinae population in the Atlantic French waters being present within these areas. These results are being used during the current negotiation process for the implementation of new offshore MPA within French waters.

3.2 GIS Data

Please indicate where GIS data of the boundaries (and zoning, if applicable) can be obtained (contact email / website).

> > Ministère de l'Écologie, du Développement durable des transports et du Logement Mer

Tour Sequoia 92055 La Defense CEDEX

Natura 2000 network :

camille.campeon@developpement-durable.gouv.fr

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>

> > Agence des aires marines protegees

President : Paul Giacobbi

Directeur : Loïc LAISNE

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Surveys and Research

4.1 Abundance, Distribution, Population Structure

Overview of Research on Abundance, Distribution and Population Structure

> > Systematic ship-based surveys (MEGASCOPE, Observatoire PELAGIS - 2015) were conducted on board the RV "Thalassa" with a top predator monitoring scheme since 2003. The primary aim of these cruises is to assess fish stocks in the bay of Biscay and English Channel. The area surveyed was restricted to the continental shelf, and incursions on the shelf break were exceptional and only in the middle part of the Bay of Biscay. Sightings of top predators were recorded during daylight by a single and multi-target (cetaceans, others megafauna and marien litters) platform composed of two observers. This scheme is part of the MFSD monitoring programm.

During 2015, 4 campaigns of IFREMER were concerned by the top predator monitoring scheme (PELAGIS/ULR) for a total of 180 days at sea :

- IBTS survey, Ifremer, PELAGIS/ULR: winter survey carried out yearly in January across the English Channel: (pelagic fish, plankton, physical parameters and top predators are recorded simultaneously): 15 days of effort in 2015 ;

-PELGAS survey, Ifremer, PELAGIS/ULR : spring survey carried out yearly in May on the continental shelf of the Bay of Biscay (pelagic fish, plankton, physical parameters and top predators are recorded simultaneously): 90 days in 2015 ;

-CGFS survey, Ifremer, PELAGIS/ULR : autumn survey carried out for the first time in September on the western English Channel (pelagic fish, plankton, physical parameters and top predators are recorded simultaneously): 20 days of effort in 2015 ;

-EVHOE Program, Ifremer, PELAGIS/ULR: autumn demersal fish survey carried out yearly in October-November across the Bay of Biscay (top predators recorded on transit between trawl hauls): 60 days of sighting effort. The recorded sightings on these campaigns accumulated more than 150 sightings of cetaceans (with recorded effort and conditions) in the ASCOBANS area. Concurrently, sightings of seabirds, turtles, elasmobranchs; litters and marine traffic have been recorded, providing an original overview of the annual distribution of the megafauna species and human activities in the ASCOBANS area.

> > Acoustic monitoring (Observatoire PELAGIS - 2015) : C-PODs (Chelonia Ltd., Mousehole, Cornwall, U.K.), were deployed in May 2014 in two sites in the french waters of the eastern English Channel for one year around . The aims were to establish a first assessment of the seasonal presence of harbour porpoises in the area before large expansion work of the commercial port of Calais. First results (2014-2015) show an annual presence of this specie around the area, and especially during winter time. This passive acoustic monitoring is ongoing to measure possibly change in the presence of harbour porpoises during the construction phase of the expansion and after.

> > Aerial survey (Observatoire PELAGIS - 2015): no survey in 2015

> > Genetic (Observatoire PELAGIS - 2015) : a study used mitochondrial DNA control region sequences to genetically identify to the species level 23 pilot whales (genus *Globicephala*) that stranded on the French coasts between 1996 and 2011 (Sabatier et al. 2015). Genetic analysis complemented morphological diagnoses, often hampered by an overlap in morphological characters between the two species or incomplete measurements. Mitochondrial DNA data allowed identification of 21 long-finned pilot whales (*Globicephala melas*) and two unusual stranding events of the more tropical species (*Globicephala macrorhynchus*). In pilot whales as in most cetaceans, shifts in species range are expected to occur due to global climate change. In this context, our study contributes to the long-term monitoring of pilot whale stranding events, providing indirect information on species occurrence.

Sabatier et al. 2015. Genetic monitoring of pilot whales, *Globicephala* spp. (Cetacea: Delphinidae), stranded on French coasts, *Mammalia*, 79(1): 111-114.

4.2 Technological Developments

New Technological Developments

> (Observatoire PELAGIS - 2015) : Recent work aimed at providing a context for the interpretation of marine megafauna stranding data and various indicators, in order to assess the achievement of specific objectives against Good Environmental Status criteria in the context of the EU Marine Strategy Framework Directive or other regional agreements (Peltier and Ridoux, 2015).

The general principle is to set a priori information on spatial distribution of marine megafauna, to determine the stranding probability at any location of the study area and generate predicted stranding data sets by using a drift model over a given period of time and across a given study area. Conversely, the observed stranding data set for the same area and period can be used to define the origin of stranded animals; and to infer the distribution of dead animals at sea, when corrected by stranding probability. Finally, stranding

anomalies are defined as the difference between observed and predicted strandings under H0, whereas anomalies in distribution and mortality are defined as the difference between the inferred and a priori spatial distributions of dead megafauna.

Among twelve indicators dedicated to harbor porpoise conservation proposed in the harbor porpoise conservation plan developed under ASCOBANS, four of them aimed to evaluate the effect of fishery activities on porpoise populations based on data collected on boats and in strandings. These indicators could be further improved by the estimation of the origin of stranded porpoises and the distribution inferred from stranded porpoises with bycatch evidences. Anomalies in distributions would highlight critical areas with a high level of interaction with fisheries. This information is very important to assess small cetacean conservation status and could help in designing better adapted mitigation actions.

Peltier, H. & Ridoux, V., 2015. Marine megavertebrates adrift: A framework for the interpretation of stranding data in perspective of the European Marine Strategy Framework Directive and other regional agreements. *Environ. Sci. Policy* 54, 240–247.

4.3 Other Relevant Research

> None

Use of Bycatches and Strandings

Post-Mortem Research Schemes

5.1 Contact Details

Contact details of research institutions and focal point

> > Stranding monitoring scheme (RNE, Observatoire PELAGIS - 2015)

In 2015, data from stranding network are currently being input in the database. Statistics of stranding for the coasts of France in the ASCOBANS region indicate more than 550 cetaceans reported. These strandings concerned 15 species and are composed of 40 % of common dolphin, 35 % of harbor porpoise, 8 % of striped dolphin, 5 % of bottlenose dolphin and 10 % other species.

In 2014, the stranding monitoring scheme recorded for the English Channel and bay of Biscay coasts two species showing a large proportion of individuals with by-catch marks (Van Canneyt et al. 2015).

- Harbor porpoise (*Phocoena phocoena*) : the temporal distribution of strandings (n=305, on french coast in 2014) shows a marked seasonality in the spring, peaking in April for the English Channel. Postmortem exams performed on 104 individuals revealed characteristic marks of by-catch of 61 individuals (58%). In the Atlantic coast, on a sample of 51 individuals examined, 26 showed evidence of bycatch (51%).

- Common dolphins (*Delphinus delphis*) : there have been new episodes of multiple strandings on the Atlantic coast between February and March 2014. During this period, more than 220 common dolphins were recorded, representing half of stranding of common dolphins on french coast in 2014. On 138 common dolphins (Decomposition Code less than or equal to 3) examined the Atlantic coast during the winter, the proportion of individuals with by-catch marks amounts to 48.5%. This rate exceeds 70% during the most acute peaks.

Winter peaks observed in recent years have a magnitude, less important than peaks observed in the 1990s, but are recurrent and linked with by-catch. This analyses made on strandings demonstrate that by-catch of Common dolphin exist in some fisheries of the bay of Biscay, fisheries which are not well or enough observed at sea.

5.2 Methodology

Methodology used (reference, e.g. publication, protocol)

> Van Canneyt O. et al. (2015). Guide des échouages de mammifères marins. Cahier technique de l'Observatoire PELAGIS sur le suivi de la mégafaune marine. Université de La Rochelle et CNRS, 62 pages.

You have attached the following Web links/URLs to this answer.

[Stranding guide \(in French\)](#)

5.3 Samples

Collection of samples (type, preservation method)

> (Observatoire PELAGIS - 2015) Stranding data provides information on death causes, demographic structure (age and reproductive status), diet (stomach content), trophic levels (stable isotopes) and subpopulation structure or movement pattern (genetic, stable isotopes, heavy metals and contaminants). A total exceeds 350 individuals were sampled according 3 levels of exams/sampling.

5.4 Database

Database (number of data sets by species, years covered, software used, online access)

> (Observatoire PELAGIS - 2015) National web database (PHP MYADMIN, with restricted access) : more than 18 000 records for the ASCOBANS area into the 1970-2015 period including 25 species.

5.5 Additional Information

Additional information (e.g. website addresses, intellectual property rights, possibility of a central database)

> <http://www.observatoire-pelagis.cnrs.fr/catalogueSI/> (metadata catalogs)

Activities and Results

5.6 Necropsies

Number of necropsies carried out in the reporting period

	Number	Recorded cause of death
Phocoena phocoena	182	
Tursiops truncatus	19	
Delphinus delphis	223	
Stenella coeruleoalba	26	
Grampus griseus	3	
Globicephala melas	15	
Globicephala macrorhynchus	0	
Lagenorhynchus albirostris	2	
Lagenorhynchus acutus	0	
Orcinus orca	1	
Hyperoodon ampullatus	0	
Mesoplodon bidens	0	
Kogia breviceps	3	
Other (please specify under number)	1 (P. macrocephalus)	
Other (please specify under number)	3 (Z. cavirostris)	
Other (please specify under number)	1 (K. sima)	
Other (please specify under number)		
Other (please specify under number)		
Other (please specify under number)		

Relevant New Legislation, Regulations and Guidelines

6.1 New Legislation, Regulations and Guidelines

Please provide any relevant information

> A new legislation on marine mammals was released in July 2011 clarifying the disturbance and the harassment. There is also an article on the necessity to declare any by-catch to help the research. There are also provisions for the protection of the habitat of the species.

Public Awareness and Education

7.1 Public Awareness and Education

Please report on any public awareness and education activities to implement or promote the Agreement to the general public and to fishermen.

- > > Public conferences and exhibitions (Oceanopolis-Brest and PELAGIS/ULR)
- > National stranding network: training for volunteers and national meeting (PELAGIS/ULR)
- > Observer training in the frame of fishing observation scheme, council regulation 812/04 (PELAGIS/ULR)
- > Regional stranding network: training for volunteers and annual meeting (LEMM/Oceanopolis)
- > Educational workshops on cetaceans implemented for schools by the Education Department/ (Oceanopolis)
- Movie on cetaceans and ferries survey produced by Brittany Ferries and Oceanopolis broadcasted onboard the ferries+ conference on board
- > New exhibition on cetaceans: National Museum Paris, partnership Oceanopolis. An itinerant version circulates in Europe.
- >

Possible difficulties encountered in implementing the Agreement

Difficulties in Implementing the Agreement

Please provide any relevant information

> None